ROCKFORD POLICE DEPARTMENT
GENERAL ORDER

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TITLE: SMALL UNMANNED AIRCRAFT SYSTEMS

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TOPICS / REFERENCE:

APPENDICES: A, B, C

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THIS ORDER REMAINS IN EFFECT UNTIL REVISED FOR RESCINDED

POLICY:

It is the policy of this department that duly trained and authorized agency personnel may deploy sUAS when such use is appropriate in the performance of their official duties, and where deployment and use, and the collection and use of any audio/video recordings or other data originating from or generated by the sUAS, comport with the policy provisions provided herein and applicable law, including (725 ILCS 167/) Freedom from Drone Surveillance Act.

PURPOSE:

This policy is intended to provide personnel who are assigned responsibilities associated with the deployment and use of small unmanned aircraft systems (sUAS) with instructions on when and how this technology and the information it provides may be used for law enforcement and public safety purposes in accordance with law.

This Order is comprised of the following numbered section:

APPENDICES:

I. DEFINITIONS:

A. ***Digital Multimedia Evidence (DME):*** Digital recording of images, sounds, and associated data.

B. ***Model Aircraft:*** A remote controlled aircraft used by hobbyists that is built, produced, manufactured, and operated for the purposes of sport, recreation, and/or competition.

C. ***Unmanned Aircraft (UA) or Unmanned Aerial Vehicle (UAV):*** An aircraft that is intended to navigate in the air without an on-board pilot. Also alternatively called Remotely Piloted Aircraft (RPA), Remotely Operated Vehicle (ROV), or Drone.

D. ***Unmanned Aircraft System (UAS):*** A system that includes the necessary equipment, network, and personnel to control an unmanned aircraft.

E. ***Small Unmanned Aircraft Systems (sUAS):*** UAS systems that utilize UAVs weighing less than 55 pounds and are consistent with Federal Aviation Administration (FAA) regulations governing model aircraft.

F. ***UAS Flight Crewmember:*** A pilot, visual observer, payload operator or other person assigned duties for a UAS for the purpose of flight or training exercise.

G. ***Unmanned Aircraft Pilot:*** A person exercising control over a UA/UAV/UAS during flight.

H. ***Remote Pilot in Command (PIC):*** A properly FAA Part 107 licensed person exercising control and final authority over a UAS during flight.

I. ***UAS Flight Crewmember:*** A pilot, visual observer (VO), payload operator or other person assigned duties for a UAS for the purpose of flight or training exercise.

J. ***Sensor System Operator:*** A visual observer who is also trained on the operation of an airborne sensor system, or imaging device, and interpretation of the image/data produced by that sensor

K. ***Uncontrolled Airspace****:* Airspace where Air Traffic Control (ATC) services are not provided (Class G airspace).

L. ***Controlled Airspace****:* Airspace where ATC services are provided (Class A, B, C, D, E). Airspace that is under direct control of ATC, except for Class E.

M. ***Image****:* A record of thermal, infrared, ultraviolet, visible light, or other electromagnetic waves; sound waves; odors; or other physical phenomena which captures conditions existing on or about real property or an individual located on that property.

N. ***Surveillance****:* With respect to an owner, tenant, occupant, invitee, or licensee of privately owned real property, the observation of such persons with sufficient visual clarity to be able to obtain information about their

identity, habits, conduct, movements, or whereabouts; or with respect to privately owned real property, the observation of such property's physical improvements with sufficient visual clarity to be able to determine unique identifying features or its occupancy by one or more persons.

II. PROCEDURES:

A. Administration: All deployments of sUAS must be specifically authorized by the chief of police, or authorized supervisory personnel. This agency has adopted the use of sUAS to provide an aerial visual perspective in responding to emergency situations and exigent circumstances, and for the following objectives:

1. ***Situational Awareness / Disaster Response:*** To assist decision makers (e.g., incident command staff; first responders; city, county, and state officials) in understanding the nature, scale, and scope of an incident—and for planning and coordinating an effective response.

2. ***Search and Rescue:*** To assist missing person investigations, AMBER Alerts, Silver Alerts, and other search and rescue missions.

3. ***Tactical Deployment:*** To support the tactical deployment of officers and equipment in emergency situations (e.g., incidents involving hostages and barricades, support for large-scale tactical operations, and other temporary perimeter security situations).

4. ***Visual Perspective:*** To provide an aerial visual perspective to assist officers in providing direction for crowd control, traffic incident management, special circumstances, and temporary perimeter security.

5. ***Scene Documentation:*** To document a crime scene, accident scene, or other major incident scene (e.g., disaster management, incident response, large-scale forensic scene investigation).

6. ***Terrorism Response:*** To counter a high risk of a terrorist attack by a specific individual or organization if the United States Secretary of Homeland Security determines that credible intelligence indicates that there is such a risk.

7. ***Imminent danger to life or serious damage to property:*** If the law enforcement agency possesses reasonable suspicion that, under particular circumstances, swift action is needed to prevent imminent danger to life or serious damage to property, to forestall the imminent escape of a suspect or the destruction of evidence. *The use of a drone under this paragraph is limited to a period of 48 hours. Within 24 hours of the initiation of the use of a drone under this paragraph (3), the chief executive officer of the law enforcement agency must report in writing the use of a drone to the local State's Attorney.

The following missions require a search warrant signed by a judge authorizing the use of the sUAS:

1. ***Surveillance***.

2. ***Thermal search*** of a residence for evidence of illegal activity within.

3. ***Recording an image or images of privately owned real property, or of the owner, tenant, occupant***, invitee, or licensee of such property with the intent to conduct surveillance on the individual or property captured in the image in violation of such person's reasonable expectation of privacy without his or her written consent. For purposes of this section, a person is presumed to have a reasonable expectation of privacy on his or her privately owned real property if he or she is not observable by persons located at ground level in a place where they have a legal right to be, regardless of whether he or she is observable from the air with the use of a drone.

B. **General Procedures for sUAS Use**

1. The agency must obtain applicable authorizations, permits, or certificates required by the Federal Aviation Administration (FAA) prior to deploying or operating the sUAS, and these authorizations, permits, and certificates shall be maintained and current.

2. The sUAS will be operated only by personnel (pilots and crew members) who have been trained and certified in the operation of the system. There must be at least one Visual Observer for any law enforcement or public safety related missions.

3. Notification must be made to the Control Tower at KRFD prior to any flight activities (815-484-5312, ext. 55326). The FAA sUAS facility map will be used to check airspace restrictions. Smart phone applications such as AIRMAP or UAV FORECAST can be used to supplement the facility maps.

4. The sUAS-certified personnel shall utilize a pre-flight checklist to inspect and test sUAS equipment prior to each deployment, to verify the proper functioning of all equipment and the airworthiness of the device. (see Appendix A)

5. The sUAS equipment is the responsibility of individual officers and will be used with reasonable care to ensure proper functioning. Equipment malfunctions shall be brought to the attention of the officer's supervisor as soon as possible so that an appropriate repair can be made or a replacement unit can be procured.

6. The sUAS equipment and all data, images, video, and metadata captured, recorded, or otherwise produced by the equipment is the sole property of the agency.

7. All flights will be documented on a form or database designed for that purpose, and all flight time shall be accurately recorded. In addition, each deployment of the sUAS shall include information regarding the reason for the flight; the time, date, and location of the flight; the names of the supervisor approving the deployment and the officers assigned; and a summary of the activities covered, actions taken, or outcomes from the deployment.

8. Except for those instances where officer safety or investigation could be jeopardized—and where reasonably possible and practical, supervisors should consider notifying the public.

9. Where there are specific and articulable grounds to believe that the sUAS will collect evidence of criminal wrongdoing and/or if the sUAS will be used in a manner that may intrude upon reasonable expectations of privacy, the agency will obtain a search warrant prior to conducting the flight.

C. **Restrictions on Using the sUAS**

1. The sUAS shall be deployed and used only to support official law enforcement and public safety missions, or training for such missions.

2. The sUAS shall not be operated in an unsafe manner or in violation of FAA rules.

3. The sUAS shall not be equipped with weapons of any kind.

4. The sUAS shall weigh less than 55 lbs, be properly registered with the FAA, and have proper FAA registration markings. The sUAS must have functioning position lights if it is to be flown within twilight hours, and have a maximum groundspeed of 100 MPH.

5. Wind speed must be within limits published by the UAS Manufacturer, with no severe weather or thunderstorms within 5 miles.

6. Visual line-of-sight (VLOS) only; the unmanned aircraft must remain within VLOS of the remote pilot in command and the person manipulating the flight controls of the small UAS. The UAS must also remain within VLOS of the visual observer. At all times the small unmanned aircraft must remain close enough to the remote PIC to be capable of seeing the aircraft with vision unaided by any device other than corrective lenses.

7. Flight over persons: The UAS may not operate over any persons not directly participating in the operation, not under a covered structure, and not inside a covered stationary vehicle.

8. Altitudes: Maximum altitude of 400 feet above ground level (AGL) or, if higher than 400 feet AGL, remain within 400 feet of a structure must yield right of way to other aircraft.

9. The PIC cannot act as a remote pilot in command or VO for more than one unmanned aircraft operation at one time.

10. No operations from a moving aircraft.

11. No operations from a moving vehicle unless the operation is over a sparsely populated area.

12. Manned aircraft: No flight will be conducted in the same area as manned public safety aircraft unless two way communication has been established between the sUAS PIC or VO and the manned aircraft PIC or aircrew. Joint operations will only be conducted if all crews are in agreement. Part of the joint mission planning will be lost communication and/or visual contact responses for both PICs. If there is any dispute, the UAS PIC will defer to the manned aircraft while that aircraft is working in the area. UAS and manned aircraft will keep altitude separation of at least 500 feet vertically. It is preferred that the two aircraft will also remain separated laterally with different geographic operational areas.

D. **Additional Regulations for operation under FAA 14 CFR 107.29 Daylight Operation COA.**

-Altitude & Distance:

1. The Maximum flight (deck) altitude will be 200 feet AGL
2. Distance of Operation will not exceed 300 ft.

-Operations: All operations will be conducted by a Remote Pilot in Command (PIC) and a Visual Observer

1. The PIC will be FAA 107A Certified

2. The PIC and Visual Observer must be able to be in visual and verbal communication **without** the use of a radio or cellphone at all times.

-Aircraft and Scene Lighting:

1. Anti-Collision Lights (Red & Green) with a 3 SM Visibility will be used on the aircraft.

2. The aircraft will also be equipped with Strobon Cree LED Anti-Collision Lights

3. Surface Area of the operations will be as well-lit as possible.

- Pre-Flight Operations:

1. PIC and Visual Observer will walk the area of the planned operation to look for any obstructions.

2. Optimal Surface Area Lighting of the area of operation will be used.

Operation Requirements:

1. Maximum altitude will be set in flight controls.
2. Visual line of site will be maintained at all times.
3. In the event the PIC or Visual Observer loose site of the aircraft for more than 10 seconds, immediate Return to Home (RTH) Procedures will be initiated
4. If a manned aircraft entered the area the unmanned aircraft will immediately initiate Return to Home (RTH) procedures.
5. If another unmanned aircraft (sUAS) enters the area of operation the RPD aircraft will immediately initiate Return to Home (RTH) procedures. Operation will resume once airspace is clear.

E. **Additional Risk Mitigations for Operation in Class D Airspace surrounding KRFD**:

1. Remote Pilot will carry a copy of the sUAS Facility Map and refer to it before each operation to ensure compliance with altitude restrictions for current area of operation.

2. Remote Pilot will additionally check an electronic source (Airmap or alternative) to further confirm altitude restrictions for current area of operation.

3. Maximum altitude will be set in the control application to ensure that the flight cannot unintentionally exceed the AGL altitude limitation for that specific area of operation.

4. Distance of the sUAS from the Remote PIC will be set in the control application and limited to 300 feet. By limiting the operating range of the sUAS, the amount

of airspace that needs to be monitored by the Remote PIC for possible manned aircraft will be reduced accordingly and the entire area of operation can be monitored more closely.

5. The DJI Inspire/1 and DJI Phantom used for these operations both implement geo-fencing that will further ensure that the sUAS does not encroach beyond the requested operating area.

6. In the event that a manned aircraft enters the area of the operation, the Remote PIC will land the sUAS immediately at the closest safe location, which will typically be immediately below the current flight location. The Remote PIC will have discretion to land at an alternate location if in their judgement this provides the best option for avoiding the manned aircraft.

F. **Aircraft Maintenance**: Any UAS utilized by the department must be properly maintained.

1. sUAS maintenance logs will be kept with each aircraft.

2. The logs will be maintained by the sUAS Pilots. The maintenance logs will be reviewed at least twice a year by the sUAS Supervisor.

3. The sUAS Supervisor will conduct an airworthiness inspection of each aircraft at that time as well.

4. Any manufacturer recommendations that effect flight safety must be completed before the aircraft is used on a subsequent flight, including training if applicable.

5. Any damage to the sUAS will be documented in an Officer's Report and submitted to the sUAS Supervisor so maintenance can be scheduled and a hazard assessment completed to prevent future damage.

6. The sUAS Supervisor will schedule and perform required periodic maintenance as required by the manufacturer.

F. **DME Retention and Management**

1. All DME shall be handled in accordance with existing policy on data and record retention, where applicable.

2. All DME shall be securely downloaded at the completion of each mission. The sUAS-certified operators will record information for each file that shall include the date, time, location, and case reference numbers or other mission identifiers—and identify the sUAS personnel involved in mission.

3. Officers shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner sUAS DME without prior written authorization and approval of the Chief of Police or his or her designee.

4. All access to sUAS DME must be specifically authorized by the Chief of Police or his or her designee, and all access is to be audited to ensure that only authorized users are accessing the data for legitimate and authorized purposes.

5. Files should be securely stored in accordance with agency policy and state records retention laws and retained no longer than necessary for purposes of training or for use in an investigation or prosecution.

G. **sUAS Supervision and Reporting.**

1. sUAS supervisory personnel shall manage all deployments and uses of sUAS to ensure that officers equipped with sUAS devices utilize them in accordance with policy and procedures defined herein.

2. An authorized sUAS supervisor or administrator will audit flight documentation at regular intervals. The results of the audit will be documented. Any changes to the flight time counter will be documented.

3. The Chief of Police or sUAS Supervisor shall file an annual report with the Illinois Criminal Justice Information Authority by April 1 of each year, in accordance with the Illinois Freedom from Drone Surveillance Act.

4. A report will be made to the FAA within 10 days of any operation that results in at least serious injury, loss of consciousness, or property damage of at least $500 (per 14 CFR § 107.9)

V. Patrol Response to UAS Calls for Service:

A. UAS operations by private citizens and businesses will sometimes require law enforcement involvement due to public safety and privacy concerns. The following guidelines will apply when responding to a UAS related call for service. (see Appendix B)

1. If the UAS weighs more than .55 pounds, ask the operator for the FAA registration number. That number should also be printed on the UAS somewhere.

2. Determine if the UAS is being operated for personal or a commercial purposes. Commercial use could be for direct payment or exchange of services, in support of a business, as part of a contract for service, etc. If the UAS is being used for a commercial purpose, ask for the operator's FAA UAS pilot license number.

3. Attempt to determine the altitude the UAS was being operated and the location it was flown. Ask if notification was made to Air Traffic Control.

4. Determine if the aircraft was flown over people other than the operator or anyone directly associated with the UAS operation.

5. Collect identification and contact information for the UAS operator, witnesses, and anyone else involved in the incident.

6. Record the model of UAS being flown and photograph it if possible.

7. Determine if video was being recorded during the flight.

8. Record if the operator is under the influence of alcohol or any other substance.

9. Generally an arrest will not be made on scene. The case will be forwarded for investigation and determination of appropriate charges. In some extreme cases, an arrest may be appropriate after consultation with the State's Attorney's Office.

10. Report incident to the FAA Regional Operations Center (Central Region) @ 817-222-5006, or 9-CSA-ROC@faa.gov. (see Appendix C)

ALL GENERAL ORDERS REMAIN IN EFFECT UNTIL REVISED OR RESCINDED.

ANY MEMBER OF THE DEPARTMENT MAY, BY VIRTUE OF EXPERTISE OR POSITION OF FUNCTION, BE DESIGNATED TO AUTHOR OR PROVIDE SOURCE MATERIAL FOR A WRITTEN DIRECTIVE. THE OVERALL AUTHORITY TO ISSUE, MODIFY OR APPROVE WRITTEN DIRECTIVES IS DESIGNATED TO THE CHIEF OF POLICE. HOWEVER, AUTHORITY AND RESPONSIBILITY TO ISSUE DIRECTIVES IS DELEGATED TO THE FOLLOWING.

ALL GENERAL ORDERS ARE SCHEDULED TO BE REVIEWED ANNUALLY BY THE GENERAL ORDER REVIEW COMMITTEE AND WHEN NECESSARY, REVISED OR CANCELED IN ACCORDANCE WITH THE PROCEDURES FOR REVIEWING WRITTEN DIRECTIVES ESTABLISHED IN GENERAL ORDER 1.10 – WRITTEN DIRECTIVES.

ALL NEW AND REVISED GENERAL ORDERS SHALL BE APPROVED BY THE CHIEF OF POLICE BEFORE ISSUE/REISSUE.

ANY EMPLOYEE WITH SUGGESTIONS FOR REVISIONS AND/OR IMPROVEMENTS TO THIS ORDER ARE ENCOURAGED TO SUBMIT THEIR IDEAS TO THEIR RESPECTIVE DISTRICT COMMANDER OR BUREAU CHIEF.

BY ORDER OF

_____ **08/29/2023**

Carla Redd

Chief of Police